

Claims

- [c1] 1.A method for transporting goods comprising:
- (a) determining that a first set of goods, located at a first supplier, and a second set of goods, located at a second supplier, are desired at a plant during a plant time range,
 - (b) estimating a plant shipment time, said plant shipment time comprising the time of travel between a cross dock location and the plant,
 - (c) estimating a first cross dock shipment time, said first cross dock shipment time comprising the time of travel between said first supplier and said cross dock location,
 - (d) estimating a second cross dock shipment time, said second cross dock shipment time comprising the time of travel between said second supplier and said cross dock location,
 - (e) determining a first scheduled pickup time range based on said plant time range, said estimation of said plant shipment time, and said estimation of said first cross dock shipment time,
 - (f) determining a second scheduled pickup time range based on said plant time range, said estimation of said plant shipment time, and said estimation of said second cross dock shipment time,
 - (g) picking up said first set of goods from said first supplier during said first scheduled pickup time range,
 - (h) delivering said first set of goods to said cross dock location,
 - (i) picking up said second set of goods from said second supplier during said second scheduled pickup time range,
 - (j) delivering said second set of goods to said cross dock location,
 - (k) combining said first set of goods and said second sets of goods into a combination of goods, and
 - (l) delivering said combination of goods to said plant during said plant time range.

- [c2] 2.The method of claim 1, further comprising the steps of associating a first unique identifier with said first set of goods and associating a second unique

identifier with said second set of goods.

- [c3] 3.The method of claim 2, wherein said first unique identifier is indicative of at least one of an origin code, a product code, a quantity code, and an item characteristic code.
- [c4] 4.The method of claim 1, wherein said plant is a supplier at a first tier and said first supplier is a supplier at a second tier, wherein said first tier is higher than said second tier.
- [c5] 5.The method of claim 1, further including the step of transmitting the first scheduled pickup time range to the first supplier and transmitting the second scheduled pickup time range to the second supplier.
- [c6] 6.The method of claim 5, wherein the step of transmitting the first scheduled pickup time range to the first supplier comprises the step of transmitting the first scheduled pickup time range via the Internet.
- [c7] 7.The method of claim 1, wherein the step of estimating a plant shipment time comprises the step of retrieving actual travel times from a database.
- [c8] 8.The method of claim 1, wherein the step of estimating a plant shipment time comprises the step of receiving a time of day during which travel is to take place.
- [c9] 9.The method of claim 1, wherein the step of estimating a plant shipment time comprises the step of receiving data indicative of a weather condition.
- [c10] 10.The method of claim 1, wherein the step of estimating a first cross dock shipment time comprises the step of retrieving actual travel times from a database.
- [c11] 11.The method of claim 1, wherein the step of estimating a first cross dock shipment time comprises the step of receiving a time of day during which travel is to take place.
- [c12] 12.The method of claim 1, wherein the step of estimating a first cross dock shipment time comprises the step of receiving data indicative of a weather

condition.

[c13] 13.The method of claim 1, further comprising the steps of picking up a third set of goods and delivering said third set of goods to said first supplier during said first scheduled pickup time range.

[c14] 14.The method of claim 13, wherein said third set of goods is located at said cross dock location.

[c15] 15.The method of claim 13, wherein said third set of goods is located at a second cross dock location.

[c16] 16.The method of claim 13 wherein said third set of goods is located at a third supplier.

[c17] 17.The method of claim 16, further comprising the step of determining a third scheduled pickup time range, said third scheduled pickup time range based on said first scheduled pickup time range and an estimation of the time of travel between said third supplier and said first supplier.

[c18] 18.The method of claim 17, further comprising the step of transmitting said third scheduled pickup time range to said third supplier.

[c19] 19.The method of claim 18, wherein the step of transmitting said third scheduled pickup time range to said third supplier comprises the step of transmitting said third scheduled pickup time range via the Internet.

[c20] 20. A system for generating a transportation schedule used in transporting goods from a first supplier and from a second supplier to a plant comprising: an input device to receive logistics data, said logistics data comprising information relating to at least one of a plant time range, an estimated plant shipment time, an estimated first cross dock shipment time, and an estimated second cross dock shipment time, a controller to determine the transportation schedule based on said logistics data, said controller comprising a processor and a memory, and an output device to generate said transportation schedule.

- [c21] 21.The system of claim 20, wherein said controller is programmed to receive the logistics data from the input device and to cause the output device to generate said transportation schedule.
- [c22] 22.The system of claim 20, wherein the input device comprises a network interface card.
- [c23] 23.The system of claim 22, wherein the network interface card is operatively coupled to the Internet.
- [c24] 24.The system of claim 20, wherein the output device comprises a network interface card.
- [c25] 25.The system of claim 24, wherein the network interface card is operatively coupled to the Internet.
- [c26] 26.A system for generating a transportation schedule used in transporting goods from a first supplier and a second supplier to a plant comprising:
a computer,
a memory, and
a computer program stored in said memory,
said computer program comprising
a first program portion that causes the computer to receive logistics data,
said logistics data comprising information relating to at least one of a plant time range, an estimated plant shipment time, an estimated first cross dock shipment time, and an estimated second cross dock shipment time,
a second program portion that causes the computer to determine the transportation schedule based on said logistics data, and
a third program portion that causes the computer to transmit a first portion of the transportation schedule to the plant, a second portion of the transportation schedule to the first supplier, and a third portion of the transportation schedule to the second supplier.
- [c27] 27.The system of claim 26, wherein said first portion of the transportation schedule, said second portion of the transportation schedule, and said third portion of the transportation schedule comprise the same information.

- [c28] 28.The system of claim 26, wherein said first portion of the transportation schedule comprises the full transportation schedule.
- [c29] 29.A system as defined in claim 26, wherein said second portion of the transportation schedule comprises the full transportation schedule.
- [c30] 30.A system as defined in claim 26, wherein said third portion of the transportation schedule comprises the full transportation schedule.
- [c31] 31.The system of claim 26, wherein the third program portion causes the computer to transmit at least a portion of the transportation schedule to each of the plant, the first supplier, and the second supplier via the Internet.
- [c32] 32.A method for shipping an item comprising the steps of:
associating a unique identifier with said item,
said unique identifier indicative of at least one of an origin code, a product code, a quantity code, and an item characteristic code,
reading said unique identifier,
relaying said unique identifier to a logistics station for assignment of a first destination to said item, and
relaying said first destination to a delivery service.
- [c33] 33.The method of claim 32, further comprising the steps of assigning a second destination to said item and relaying said second destination to said delivery service.
- [c34] 34.The method of claim 33, further comprising the step of delivering said item to said second destination.
- [c35] 35.The method of claim 32, further comprising the step of delivering said item to said first destination.
- [c36] 36.The method of claim 35, further comprising the steps of assigning a first location code to said unique identifier and relaying said first location code to said logistics station.
- [c37] 37.The method of claim 36, further comprising the steps of assigning a second

location code to said unique identifier upon delivery of said item to said first destination and relaying said unique identifier, including said second location code, to said logistics station upon delivery of said item to said first destination.

[c38] 38.The method of claim 32, wherein the step of reading said unique identifier is accomplished by using a machine reading device.

[c39] 39.The method of claim 32, further comprising the step of providing a shipping label associated with said item, said shipping label being capable of storing said unique identifier in machine readable form.

[c40] 40.The method of claim 39, wherein the step of reading said unique identifier is accomplished by using a machine reading device.

[c41] 41.The method of claim 32, wherein the relaying steps are accomplished by using wireless transmission.

[c42] 42.The method of claim 32, wherein the relaying steps are accomplished by using the Internet.

[c43] 43.The method of claim 32, wherein said delivery service comprises an operator of a vehicle.

[c44] 44.A system for shipping an item between an origin and one of a plurality of possible plant destinations, the system comprising:
(a)a logistics station,
said logistics station comprising an input device to receive logistics data,
said logistics data being indicative of at least one item characteristic and of an item requirement at each of the plurality of possible plant destinations,
said logistics station further comprising an output device for generating a desired plant destination,
said logistics station further comprising a controller operatively coupled to the input device and the output device,
said controller comprising a processor and a memory,
said controller being programmed to receive the logistics data,
said controller being further programmed to determine said desired plant

destination from said plurality of possible plant destinations,
said controller causing said output device to generate said desired plant
destination;

(b)a receiver for obtaining data from a shipping label adapted to store a unique
identifier in machine readable form, said shipping label being associated with
said item, and

(c)a first transmitter for relaying data indicative of said desired plant destination
from said logistics station to a delivery service.

[c45] 45.The system of claim 44, wherein said input device comprises a network
interface card.

[c46] 46.The system of claim 45, wherein said network interface card is operatively
coupled to the Internet.

[c47] 47.The system of claim 44, wherein said output device comprises a network
interface card.

[c48] 48.The system of claim 47, wherein said network interface card is operatively
coupled to the Internet.

[c49] 49.The system of claim 44, further comprising a second transmitter for relaying
said unique identifier from said delivery service to said logistics station for
assignment of said desired plant destination to said item.

[c50] 50.The system of claim 49, wherein said relaying is accomplished by wireless
transmission.

[c51] 51.The system of claim 44, wherein said delivery service comprises an operator
of a vehicle.